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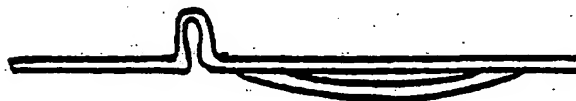
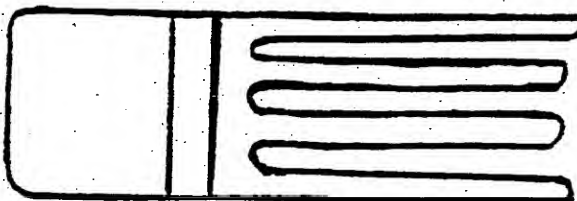
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(54) Title: GOLF TOOL

(57) Abstract

Device, so-called "green fork", which may be brought by a golfer, in order to conveniently and satisfactorily repair ball scars or indentations, caused by golf balls landing in a golf course's green, so that the green surface is kept even without indentations or ridges which may prevent for precision playing. The device or "green fork" (10) includes a handle (12) and a fork (14) with at least three extendible prongs (16, 18, 20) where the centre prong (18) is somewhat shorter than the outer prongs (16, 20) and is forming an outwardly bent curve behind these. In a modified version according to the invention, the "green fork" includes two outer prongs (16, 20) and two inner prongs (18, 19) of same design as previously described.



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GOLF TOOL

This invention relates to a device eliminating ball scars or ball marks, caused by golf balls falling down on a golf course's green.

A ball scar occurs when a golf ball lands on the golf course's green. The size of the scar depends on the golf ball's velocity and the angle at impact as well as on the green's moisture content. A ball at high orbit may impact almost 90° angle and at a velocity of upto 250 km/h, thereby that leaving an indentation formed like the golf ball. This scar makes an unevenness on the green, which will make precision playing difficult. In addition, the green will be depressed in the impact area, and thereby wither, leaving a brown patch, unless the ball scar is eliminated immediately.

A condition for using a golf course, is that the player has attended theoretical and practical courses, which also includes the players obligations, among them the obligation to eliminate indentations or ball scars occurring on the green, when the golf ball impacts. Every golf player is therefore obliged to bring a suitable tool, like the "green fork", for executing these repairs.

For a number of years tools of various types have been used. However, all types have had about the same design and have proved to be insufficient for the task, being elimination of ball scars in a quick and easy way, so that the

green surface is kept even and free from indentations and patches of withered, brown green.

US-pat. no. 4.984.790 describes a tool for eliminating golf ball scars, which are caused by a golf ball landing on a green. The tool comprises a base part with three extendible prongs, of which the centre prong is the longest. When used, the tool is inserted into the green, whereby the base part is forced down so that the prongs are forced upwards, to loosen up the depressed green and to even out the indentation. It is unlikely that such repairs may be accomplished successfully in one single process, because the tool necessarily must be inserted from several sides, before the desired result has been achieved; accordingly, the repair takes unnecessarily long time, and several insertions into the green is harmful for the green.

The aim of the invention is to relieve the abovementioned draw-backs mentioned by a device, so-called "green fork" of a new and improved type, with distinctive features as stated, in the characterizing part of claim 1, mentioned below.

The "green fork", according to the invention, has been made as prototypes that have been tested with a view to choice of final design, material and cost effective manufacturing.

Reference is made to the enclosed drawings, of which:

- Fig. 1** shows a front plan view of a "green fork" of the invention
- Fig. 2** shows a side plan view of a "green fork" of the invention
- Fig. 3 - 5** is a side plan view according to figure 1, during insertion into the green surface.
- Fig. 6** is a side plan view of the "green fork" with the handle bent down and the prongs upwards during application of the lever-principle.
- Fig. 7** is a side plan view of the "green fork" during retraction.
- Fig. 8** is a view of a modified "greenn fork" version with four prongs.

A flat shaped device 10, so-called "green fork" according to the invention, manufactured from suitable material, for instance, steel, comprises a handle 12 and a fork 14 with at least three extendible prongs 16, 18 and 20, where the centre prong 18 is somewhat shorter than the outer prongs 16 and 20, making a outwards curve behind these. At the passage between the handle 12 and the fork 14 an improved, outwardly bent handle grip. The outer end of the handle 12 is supplied with a hole 24 for suspension of the device.

The mode of operation is as follows. When repairing a golf ball scar the "green fork" 10 is inserted into the green surface as shown in fig. IV-VII, whereby the prongs 16, 18 and 20 take the positions as shown, with the centre prong 18 placed in oblique position below the indentation 26. When the handle 12 is being tilted downwards as shown in fig. VIII, the prongs 16 - 20 are bent upwards with the centre prong 18 in near horizontal position underneath the bottom of the indentation 26, which is thereby being pushed upwards and the depressed green is being loosened, air is supplied,

preventing withering. When the device 10 is being retracted from the green, the centre prong 18 will keep its near horizontal position underneath the bottom of the indentation 26, which thereby is lifted additionally, practically to the position it had before the ball's impact.

The invention also includes a "green fork" in a modified version, as shown in figure 8, with four prongs, of which two outer prongs 16 and 20 and two inner prongs 18 and 19, but otherwise corresponding to the earlier described version, with same function as the former.

As described above, are the invention development of so-called "green forks", of new and improved design, which will make it possible to repair ball scars or indentations caused by golf balls, in a quick and easy way.

PATENT CLAIMS

1. Device, a so-called "green fork" (10), for repairing golf ball scars or indentations on a golf course's green, including a handle 12 and a fork 14 with three prongs (16, 18, 20) characterized in that the centre prong is somewhat shorter than the outer prongs (16, 20) and is forming a outwards curve behind these.
2. Device in accordance whit claim 1., characterized in comprising four prongs, of which two outer prongs (16, 20) and two inner prongs (18, 19) of the same design as den previously mentioned device (10).

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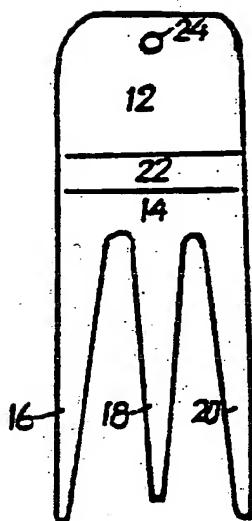


FIG. 1

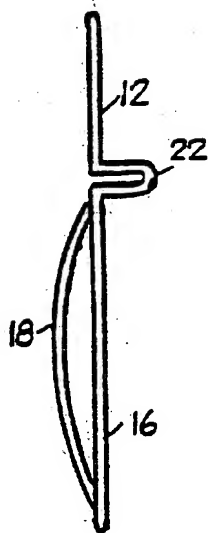


FIG. 2

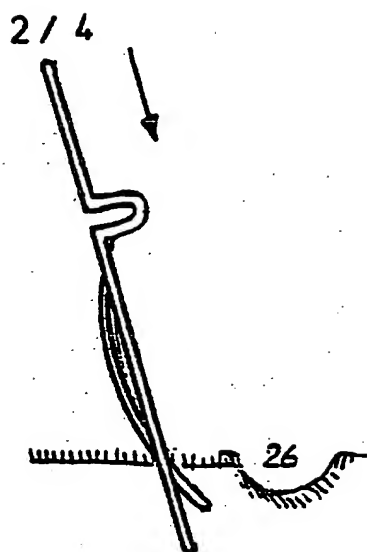


FIG. 3

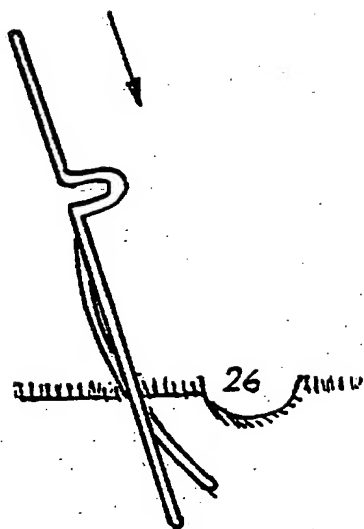


FIG. 4

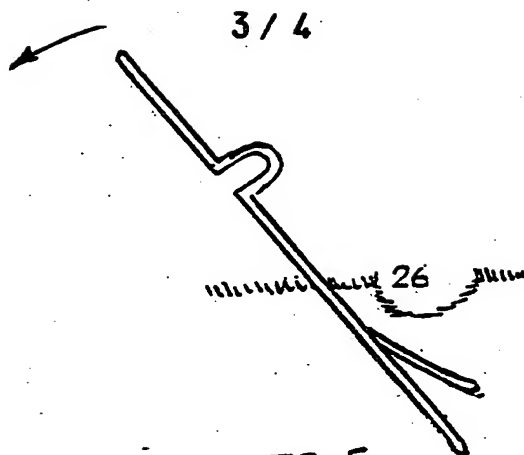


FIG. 5

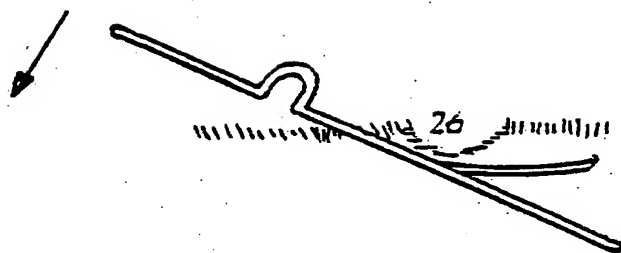


FIG. 6

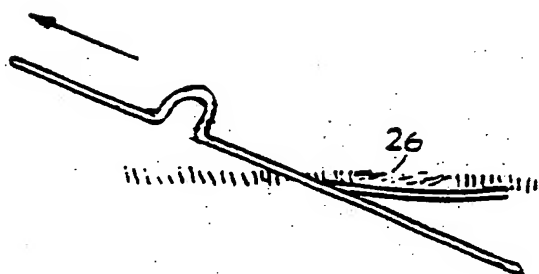
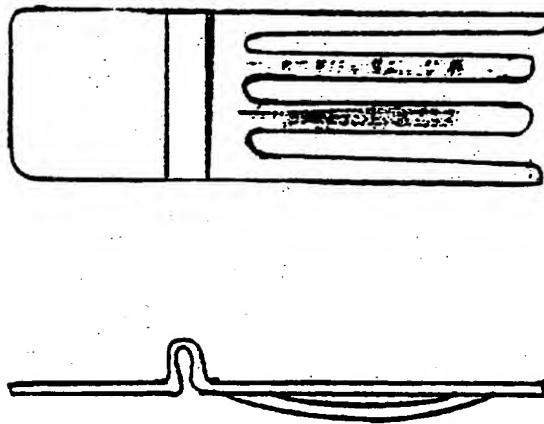


FIG. 7

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FIGUR 8



INTERNATIONAL SEARCH REPORT

International application No.
PCT/NO 96/00011

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: A63B 57/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: A63B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3763515 A (T.E. VOSS), 9 October 1973 (09.10.73)	1-2
A	US 3870299 A (J.M. HOWE), 11 March 1975 (11.03.75)	1-2
A	US 4063731 A (B.E. KITAY), 20 December 1977 (20.12.77)	1-2
A	US 4315624 A (C.E. BUCKMAN), 16 January 1982 (16.01.82)	1-2

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Date of the actual completion of the international search

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4386774 A (C.E. BUCKMAN), 7 June 1983 (07.06.83) --	1-2
A	US 4984790 A (J.C. DOWDY ET AL), 15 January 1991 (15.01.91) -- -----	1-2

INTERNATIONAL SEARCH REPORT			
Information on patent family members			
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 3763515	09/10/73	NONE	
US-A- 3870299	11/03/75	NONE	
US-A- 4063731	20/12/77	NONE	
US-A- 4315624	16/01/82	US-A- 4386774	07/06/83
US-A- 4386774	07/06/83	US-A- 4315624	16/02/82
US-A- 4984790	15/01/91	NONE	

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